EH-416

KEYENCE CORPORATION · ES series

FEATURES

Separate-amplifier proximity sensor head, standard non-shielded ø14.5 cylindrical/threaded type, for the ES series amplifier.

Hardware

Type:
Standard, non-shielded, cylindrical and threaded (ø14.5)

Detectable object:
Ferrous metals (see Characteristics for nonferrous metals)

Standard target (iron, t=1 mm):
20 × 20 mm

Stable detecting range:
0 to 6 mm

Maximum detecting distance:
13 mm

Hysteresis:
0.05 mm

Repeatability:
0.012 mm

I/O Specifications

Communication

Built-in ports:
Not available (passive sensor head; connects to ES-32DC amplifier via dedicated cable)

Protocols:
Not available (passive sensor head)

Communication expansion:
None

Electrical

Supply voltage:
Not available (passive sensor head; powered by ES series amplifier)

Power consumption:
Not available (passive sensor head)

Backplane Current Consumption:
Not applicable

Environmental

Operating temperature:
-10 to +60 °C (No freezing)

Storage temperature:
Not available

Relative humidity:
35 to 85 % RH (No condensation)

Temperature characteristics:
±10% max. of detecting distance at 23 °C, within -10 to +60 °C

Protection rating:
IP67

Physical

Dimensions (H×W×D):
Not available (CAD drawing only; no numeric dimensions published on official model page)

Weight:
Approx. 72 g (including nuts and 3-m cable)

Lifecycle

Current ES series product line; official product pages active as of 2026-09, not marked discontinued. (Last verified:
2026-09)